



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 24, 2018

MEMORANDUM TO: Samuel S. Lee, Chief  
Licensing Branch 1  
Division of Licensing, Siting,  
and Environmental Analysis  
Office of New Reactors

FROM: Getachew Tesfaye, Senior Project Manager /RA/  
Licensing Branch 1  
Division of Licensing, Siting,  
and Environmental Analysis  
Office of New Reactors

SUBJECT: SUMMARY OF THE JUNE 27, 2018, CATEGORY 1 PUBLIC  
TELECONFERENCE TO DISCUSS NUSCALE POWER, LLC  
PROPOSAL FOR A FUEL RACK COMBINED LICENSE  
INFORMATION ITEM ASSOCIATED WITH THE NUSCALE  
DESIGN CERTIFICATION APPLICATION

The U.S. Nuclear Regulatory Commission (NRC) held a Category 1 public teleconference on June 27, 2018, to discuss the fuel rack design associated with the NuScale Power, LLC (NuScale) design certification application. Specifically, the NuScale proposal to convert the fuel rack design evaluation into a combined license (COL) information item. Participants included personnel from NuScale and a member of the general public.

The public meeting notice dated June 27, 2018, can be found in the NRC's Agencywide Documents Access and Management Systems under Accession No. ML18177A485. This meeting notice was also posted on the NRC public website.

Enclosed is the meeting agenda (Enclosure 1), list of participants (Enclosure 2), and overview (Enclosure 3).

Docket No. 52-048

Enclosures:

1. Meeting Agenda
2. List of Attendees
3. Meeting Overview

cc w/encl.: DC NuScale Power, LLC Listserv

CONTACT: Getachew Tesfaye NRO/DLSE  
301-415-8013

SUBJECT: SUMMARY OF THE JUNE 27, 2018, CATEGORY 1 PUBLIC TELECONFERENCE  
TO DISCUSS NUSCALE POWER, LLC PROPOSAL FOR A FUEL RACK  
COMBINED LICENSE INFORMATION ITEM ASSOCIATED WITH THE NUSCALE  
DESIGN CERTIFICATION APPLICATION  
DATED: JULY 24, 2018

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<b>OFFICE</b>	DLSE/LB1:PM	DLSE /LB1:LA	DLSE/PPAC	DNRL/LB1:PM
<b>NAME</b>	GTesfaye	MMoore	ANeuhausen*	GTesfaye (signed)
<b>DATE</b>	7/18 /2018	7/23/2018	7/19/2018	7/24/2018

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**CATEGORY 1 PUBLIC TELECONFERENCE TO DISCUSS NUSCALE POWER, LLC**  
**PROPOSAL FOR A FUEL RACK COMBINED LICENSE INFORMATION ITEM ASSOCIATED**  
**WITH THE NUSCALE DESIGN CERTIFICATION APPLICATION**

**MEETING AGENDA**

**June 27, 2018**

**01:30 - 01:35 PM**

Introductions and Identification of topics

**01:35 - 02:25 PM**

Discussion of the fuel rack design associated with the NuScale Power, LLC (NuScale) design certification application.

**02:25 – 02:30 PM**

Public Comments/Questions

**02:30 PM**

Meeting Closure

**U.S. NUCLEAR REGULATORY COMMISSION**

**CATEGORY 1 PUBLIC TELECONFERENCE TO DISCUSS NUSCALE POWER, LLC**  
**PROPOSAL FOR A FUEL RACK COMBINED LICENSE INFORMATION ITEM ASSOCIATED**  
**WITH THE NUSCALE DESIGN CERTIFICATION APPLICATION**

**LIST OF ATTENDEES**

**June 27, 2018**

<b>Name</b>	<b>Organization</b>
Getachew Tesfaye	U.S. Nuclear Regulatory Commission (NRC)
Manas Chakravorty	NRC
Alissa Neuhausen	NRC
Christopher VanWert	NRC
Andrew Yeshnik	NRC
Samuel Lee	NRC
Carrie Fosaaen	NuScale Power, LLC (NuScale)
Lee Dougherty	NuScale
Elisa Fairbanks	NuScale
Mark Shaver	NuScale
Paul Guinn	NuScale
Steve Shaw	NuScale
Pete Peterson	NuScale
J. Bergman	Member of the public

**U.S. NUCLEAR REGULATORY COMMISSION**  
**OVERVIEW OF THE JUNE 27, 2018, TELECONFERENCE TO DISCUSS**  
**NUSCALE POWER, LLC PROPOSAL FOR A FUEL RACK COMBINED LICENSE**  
**INFORMATION ITEM ASSOCIATED WITH THE**  
**NUSCALE DESIGN CERTIFICATION APPLICATION**

The purpose of this teleconference was to discuss the fuel rack design associated with the NuScale Power, LLC (NuScale) design certification application (DCA), specifically, NuScale's proposal to convert part or all of the fuel rack design information into a combined license (COL) information item.

- a. The following is a summary of NuScale proposal and the U.S. Nuclear Regulatory Commission (NRC) staff feedback:
  - NuScale discussed their plan to convert part or all of the fuel rack design information in the DCA to a COL information item. At a minimum NuScale is planning to convert the seismic analysis portion of the fuel rack design information to a COL information item. In order to help in their decision making, NuScale requested the staff to provide them the status of the reviews on criticality, materials, and thermal hydraulics for the fuel racks, specifically whether there are any requests for additional information (RAIs) that have not yet been transmitted.
  - The NRC staff's responses for each area are as follows:
    - Criticality – the review is in a final stage and NRC staff doesn't anticipate issuing any new RAIs to complete their review. However, the NRC staff cautioned that there is a tie between the criticality analysis, fuel assembly drop analysis, and the seismic structural analysis and that any COL information item should account for the interfaces between these different analyses.
    - Materials - there is one outstanding RAI on the qualification program for the neutron absorber that should have no impact on the proposed approach. However, the NRC staff noted that if the current configuration changes as a result of a new seismic structural analysis, it could potentially invalidate the current review results and/or may require additional analyses.
    - Thermal Hydraulics (not present at the teleconference, provided input to the project manager) – the NRC staff has completed its review based on the information provided in Technical Report (TR)-0816-49833, "Fuel Storage Rack Analysis," Revision 0. If any of the information/design configuration in the TR that was used in the thermal hydraulic evaluation changes as a result

of a revised seismic structural analysis, it could potentially invalidate the current staff conclusion.

- NuScale recognizes there are interfaces between the seismic structural analysis and other review areas and intends to capture these in the COL information item. These interfaces will have to be verified at the COL stage. NuScale also cited the Advanced Boiling Water Reactor (ABWR) DC as an example where the fuel rack design information was a COL information item.
  - The NRC staff cautioned that the ABWR experience was challenging at the COL stage since the COL information item did not lineup with the information missing during COL application review.
- b. Next step: The NRC staff will discuss internally the feasibility of a partial COL information item and will communicate to NuScale if there are concerns. NuScale plans to include the COL information item in Rev 2 of the DCA, which is scheduled to be submitted by October 31, 2018. The NRC staff indicated that it would be beneficial to see the COL item before the Rev. 2 submittal, if possible. Both the NRC staff and NuScale agreed to exit the ongoing audit of the fuel rack seismic structural design documents.